

What is claimed is:

- 1 1. A system for navigating within a graphical user interface without
2 using a pointing device, comprising:
3 a set of one or more keyboard shortcuts comprising at least one key, each
4 keyboard shortcut specifying an action effecting a graphical user interface which
5 is executed upon input of each key in the keyboard shortcut and at least one key
6 corresponding to a semantically-meaningful hyperlink within Web content; and
7 a Web browser providing navigation within the graphical user interface,
8 comprising:
9 an output component providing the Web content on a view within
10 the graphical user interface and including a graphical pointer indicating a location
11 within the view; and
12 an input component intercepting at least one key input by a user
13 and mapping the intercepted key to one such keyboard shortcut, and executing the
14 action specified by the keyboard shortcut and updating the view within the Web
15 content relative to the graphical pointer.
- 1 2. A system according to Claim 1, further comprising:
2 a scrolling component scrolling the view within the Web content in a
3 direction indicated by the intercepted key.
- 1 3. A system according to Claim 2, further comprising:
2 a control module scrolling to the view at variable speed.
- 1 4. A system according to Claim 1, further comprising:
2 a fetching component fetching the Web content corresponding to one of a
3 next or previous Web page in a direction indicated by the intercepted key.
- 1 5. A system according to Claim 1, further comprising:
2 a display area defined on the graphical user interface receiving outputted
3 visualized Web content.
- 1 6. A system according to Claim 1, further comprising:

2 at least one of a display area defined on the graphical user interface and a
3 user input region receiving inputted user inputs.

1 7. A system according to Claim 6, further comprising:
2 a keyboard device receiving textual user inputs.

1 8. A system according to Claim 1, further comprising:
2 navigational groups of keyboard shortcuts, comprising at least one of:
3 a navigation group navigating to a selection within a Web page;
4 a retrieval group retrieving a Web page;
5 a caching group accessing at least one of a cached or similar Web
6 page;
7 a sequence group accessing a next or previous Web page in a
8 sequence;
9 a focus group moving a focus within the view to a user input
10 region;
11 an enumerated group accessing one or more enumerated Web
12 pages;
13 a hierarchy group accessing a previous Web page in a hierarchy;
14 and
15 a help group accessing a help Web page.

1 9. A method for navigating within a graphical user interface without
2 using a pointing device, comprising:
3 defining a set of one or more keyboard shortcuts comprising at least one
4 key, each keyboard shortcut specifying an action effecting a graphical user
5 interface which is executed upon input of each key in the keyboard shortcut and at
6 least one key corresponding to a semantically-meaningful hyperlink within Web
7 content; and
8 navigating within the graphical user interface, comprising:
9 providing the Web content on a view within the graphical user
10 interface and including a graphical pointer indicating a location within the view;

11 intercepting at least one key input by a user and mapping the
12 intercepted key to one such keyboard shortcut; and
13 executing the action specified by the keyboard shortcut and
14 updating the view within the Web content relative to the graphical pointer.

1 10. A method according to Claim 9, further comprising:
2 scrolling the view within the Web content in a direction indicated by the
3 intercepted key.

1 11. A method according to Claim 10, further comprising:
2 scrolling to the view at variable speed.

1 12. A method according to Claim 9, further comprising:
2 fetching the Web content corresponding to one of a next or previous Web
3 page in a direction indicated by the intercepted key.

1 13. A method according to Claim 9, further comprising:
2 outputting visualized Web content within a display area defined on the
3 graphical user interface.

1 14. A method according to Claim 9, further comprising:
2 outputting visualized Web content within a display area defined on the
3 graphical user interface.

1 15. A method according to Claim 9, further comprising:
2 inputting user inputs within at least one of a display area defined on the
3 graphical user interface and a user input region.

1 16. A method according to Claim 15, further comprising:
2 receiving textual user inputs via a keyboard device.

1 17. A method according to Claim 9, further comprising:
2 defining navigational groups of keyboard shortcuts, comprising at least
3 one of:
4 navigating to a selection within a Web page;

5 retrieving a Web page;
6 accessing at least one of a cached or similar Web page;
7 accessing a next or previous Web page in a sequence;
8 moving a focus within the view to a user input region;
9 accessing one or more enumerated Web pages;
10 accessing a previous Web page in a hierarchy; and
11 accessing a help Web page.

1 18. A computer-readable storage medium holding code for performing
2 the method according to Claim 9.

1 19. An apparatus for navigating within a graphical user interface
2 without using a pointing device, comprising:
3 means for defining a set of one or more keyboard shortcuts comprising at
4 least one key, each keyboard shortcut specifying an action effecting a graphical
5 user interface which is executed upon input of each key in the keyboard shortcut
6 and at least one key corresponding to a semantically-meaningful hyperlink within
7 Web content; and
8 means for navigating within the graphical user interface, comprising:
9 means for providing the Web content on a view within the
10 graphical user interface and including a graphical pointer indicating a location
11 within the view;
12 means for intercepting at least one key input by a user and
13 mapping the intercepted key to one such keyboard shortcut; and
14 means for executing the action specified by the keyboard shortcut
15 and updating the view within the Web content relative to the graphical pointer.

1 20. A system for providing keyboard-based graphical user interface
2 navigation, comprising:
3 a graphical user interface comprising an output area displaying Web
4 content and a user input region receiving user keyboard inputs;

5 a set of one or more keyboard shortcuts comprising at least one key
6 available on a keyboard communicatively interfaced to the graphical user
7 interface, each keyboard shortcut specifying an action effecting the graphical user
8 interface which is executed upon input of each key in the keyboard shortcut and at
9 least one key corresponding to a semantically-meaningful hyperlink within the
10 Web content; and
11 a Web browser interpreting keyboard shortcuts received from a user to
12 navigate within the output area of the graphical user interface, comprising:
13 a view defined within the output area of the graphical user
14 interface providing the Web content;
15 a graphical pointer navigable maintained within the output area
16 and indicating a location within the view of the Web content; and
17 a keyboard shortcut module intercepting at least one key input by a
18 user and mapping the intercepted key to one such keyboard shortcut, and
19 executing the action specified by the keyboard shortcut and updating the view
20 within the Web content relative to the graphical pointer.

1 21. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut navigating to a selection within a Web page
3 responsive to the intercepted key.

1 22. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut retrieving a Web page responsive to the
3 intercepted key.

1 23. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut accessing at least one of a cached or similar
3 Web page responsive to the intercepted key.

1 24. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut accessing a next or previous Web page in a
3 sequence responsive to the intercepted key.

- 1 25. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut moving a focus within the view to a user
3 input region.
- 1 26. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut accessing one or more enumerated Web
3 pages responsive to the intercepted key.
- 1 27. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut accessing a previous Web page in a
3 hierarchy responsive to the intercepted key.
- 1 28. A system according to Claim 20, further comprising:
2 at least one keyboard shortcut accessing a help Web page responsive to the
3 intercepted key.
- 1 29. A method for providing keyboard-based graphical user interface
2 navigation, comprising:
3 providing a graphical user interface comprising an output area displaying
4 Web content and a user input region receiving user keyboard inputs;
5 defining a set of one or more keyboard shortcuts comprising at least one
6 key available on a keyboard communicatively interfaced to the graphical user
7 interface, each keyboard shortcut specifying an action effecting the graphical user
8 interface which is executed upon input of each key in the keyboard shortcut and at
9 least one key corresponding to a semantically-meaningful hyperlink within the
10 Web content; and
11 interpreting keyboard shortcuts received from a user to navigate within the
12 output area of the graphical user interface, comprising:
13 providing the Web content on a view within the output area of the
14 graphical user interface;
15 maintaining a graphical pointer navigable within the output area
16 and indicating a location within the view of the Web content;

17 intercepting at least one key input by a user and mapping the
18 intercepted key to one such keyboard shortcut; and
19 executing the action specified by the keyboard shortcut and
20 updating the view within the Web content relative to the graphical pointer.

1 30. A method according to Claim 29, further comprising:
2 navigating to a selection within a Web page responsive to the intercepted
3 key.

1 31. A method according to Claim 29, further comprising:
2 retrieving a Web page responsive to the intercepted key.

1 32. A method according to Claim 29, further comprising:
2 accessing at least one of a cached or similar Web page responsive to the
3 intercepted key.

1 33. A method according to Claim 29, further comprising:
2 accessing a next or previous Web page in a sequence responsive to the
3 intercepted key.

1 34. A method according to Claim 29, further comprising:
2 moving a focus within the view to a user input region.

1 35. A method according to Claim 29, further comprising:
2 accessing one or more enumerated Web pages responsive to the
3 intercepted key.

1 36. A method according to Claim 29, further comprising:
2 accessing a previous Web page in a hierarchy responsive to the intercepted
3 key.

1 37. A method according to Claim 29, further comprising:
2 accessing a help Web page responsive to the intercepted key.

1 38. A computer-readable storage medium holding code for performing
2 the method according to Claim 29.

1 39. An apparatus for providing keyboard-based graphical user
2 interface navigation, comprising:

3 means for providing a graphical user interface comprising an output area
4 displaying Web content and a user input region receiving user keyboard inputs;

5 means for defining a set of one or more keyboard shortcuts comprising at
6 least one key available on a keyboard communicatively interfaced to the graphical
7 user interface, each keyboard shortcut specifying an action effecting the graphical
8 user interface which is executed upon input of each key in the keyboard shortcut
9 and at least one key corresponding to a semantically-meaningful hyperlink within
10 the Web content; and

11 means for interpreting keyboard shortcuts received from a user to navigate
12 within the output area of the graphical user interface, comprising:

13 means for providing the Web content on a view within the output
14 area of the graphical user interface;

15 means for maintaining a graphical pointer navigable within the
16 output area and indicating a location within the view of the Web content;

17 means for intercepting at least one key input by a user and
18 mapping the intercepted key to one such keyboard shortcut; and

19 means for executing the action specified by the keyboard shortcut
20 and updating the view within the Web content relative to the graphical pointer.